IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently Amended) A method for driving an actuator, the method comprising the act of changing electrical damping of the actuator by selectively activating at least one switch, in response to a control signal from a controller, for switching in or out an electrical damping element providing a negative resistance, wherein the electrical damping element is connected in series with the controller and the actuator.

2.(Previously Presented) The method of claim 1, wherein the electrical damping of the actuator is changed by changing an electrical resistance of an actuator drive loop.

Claim 3 (Canceled)

4.(Previously Presented) The method of claim 1, wherein the electrical damping of the actuator is increased with respect to the damping during normal operative conditions when an actuator position deviates from a target position, and wherein the electrical damping of the actuator is decreased to the normal damping when the actuator has recovered the target position.

5.(Previously Presented) The method of claim 1, applied in an optical disc drive for radially driving an objective lens radial actuator, wherein the electrical damping of the radial actuator is increased when a radial error signal indicates a radial error exceeding a predefined threshold, or when the radial error signal becomes absent;

and wherein the electrical damping of the radial actuator is decreased to the normal damping when the radial error signal indicates said radial error decreasing below said predefined threshold, or when the radial error signal returns, respectively.

6.(Previously Presented) The method of claim 1, applied in an

optical disc drive for axially driving an objective lens focus actuator, wherein the electrical damping of the focus actuator is increased when a focus error signal indicates a focus error exceeding a predefined threshold, or when the focus error signal becomes absent;

and wherein the electrical damping of the focus actuator is decreased to the normal damping when the focus error signal indicates said focus error decreasing below said predefined threshold, or when the focus error signal returns, respectively.

7.(Previously Presented) The method of claim 1, applied in an optical disc drive for radially driving an objective lens radial actuator or for axially driving an objective lens focus actuator, wherein the electrical damping of the actuator is increased in response to a command indicating a jump to another track, or during a power up phase, and wherein the electrical damping of the actuator is decreased to the normal damping when the new target track has been reached or when the power up phase has ended, respectively.

8.(Currently Amended) An actuator driver circuit comprising:

a variable negative ~~internal~~ resistance including an input resistor, a first resistor and a second resistor; and

at least ~~once~~ one switch for selectively connecting the input resistor to ~~at least one of~~ the first resistor ~~and~~ or the second resistor in response to a control signal from a controller.

9.(Currently Amended) An actuator driver circuit for actuating an actuator having a first terminal and a second terminal, the actuator driver circuit comprising a drive signal source connected to the first terminal of the actuator, and an electrical damping element having a negative resistance connected between the second terminal of the actuator and ground, wherein the first terminal is configured to receive the drive signal and is different from the second terminal.

10.(Previously Presented) The actuator of claim 9, comprising controllable means for selectively switching said electrical damping element into or out of a signal path from the actuator to the ground.

11. (Previously Presented) The actuator of claim 9, comprising controllable means for selectively switching components of said electrical damping element into or out of operation in order to adjust damping properties of the electrical damping element.

12. (Currently Amended) An actuator assembly comprising:

an actuator having a first terminal and a second terminal,

a drive signal source connected to the first terminal of the actuator, and

an electrical damping element having a negative resistance connected between the second terminal of the actuator and ground, wherein the first terminal is configured to receive a drive signal from the drive signal source and is different from the second terminal.

13. (Previously Presented) The actuator of claim 12, further comprising controllable means for selectively switching said electrical damping element into or out of a signal path between the second terminal of the actuator and the ground.

14. (Previously Presented) The actuator of claim 12, further comprising controllable means for selectively switching components of said electrical damping element into or out of operation in order to adjust damping properties of the electrical damping element.

15. (Previously Presented) A disc drive apparatus for reading or writing a disc, the apparatus comprising a pickup element and at least one actuator for manipulating the pickup element;

wherein the disc drive apparatus comprises the actuator driver circuit according to claim 8.

16. (Previously Presented) The disc drive apparatus according to claim 15, wherein said pickup element is an objective lens of an optical system for scanning tracks of an optical disc.

17. (New) The method of claim 1, wherein the electrical damping element is connected in between the controller and the actuator.

18.(New) The actuator driver circuit of claim 8, wherein the variable negative resistance is connected in series with the controller.

19.(New) The actuator driver circuit of claim 8, wherein the variable negative resistance further includes an operational amplifier having an inverting input and an output, the input resistor and the at least one switch being connected to the inverting input, and the second resistor being connected between the at least one switch and the output.

20.(New) The actuator driver circuit of claim 19, wherein the operational amplifier further has a non-inverting input, the non-inverting input being connected to the ground through a further resistor.

21.(New) The actuator driver circuit of claim 8, wherein the variable negative resistance is connected in series between the controller and an actuator driven by the actuator driver circuit.